

Title (en)
MOLDED CATALYST, PROCESS FOR PRODUCING THE MOLDED CATALYST, AND PROCESS FOR PRODUCING OXIRANE COMPOUND

Title (de)
GEFORMTER KATALYSATOR, VERFAHREN ZU DESSEN HERSTELLUNG SOWIE VERFAHREN ZUR HERSTELLUNG EINER OXIRANKOMPONENTE

Title (fr)
CATALYSEUR MOULE ET SON PROCEDE DE FABRICATION, ET PROCEDE DE FABRICATION DE COMPOSE D'OXIRANE

Publication
EP 1252928 A4 20041110 (EN)

Application
EP 01948950 A 20010129

Priority
• JP 0100585 W 20010129
• JP 2000025052 A 20000202

Abstract (en)
[origin: EP1252928A1] A titanium-containing silicon oxide molded catalyst satisfying all of the following conditions (1) to (4): (1) an average pore diameter is 10 ANGSTROM or more, (2) 90% or more of the whole pore volume have pore diameters of 5 to 200 ANGSTROM , (3) a specific pore volume is 0.2 cm<3>/g or more, and (4) it is obtained by using as a template a quaternary ammonium ion of the following general formula (I) or an amine of the following general formula (II), then, removing the template. $\text{NR}_{<1>} \text{R}_{<2>} \text{R}_{<3>} \text{R}_{<4>} \text{Ü}^{<+>}$ (in the formula (I), R<1> represents a linear or branched hydrocarbon group having 2 to 36 carbon atoms, and R<2> to R<4> represent an alkyl group having 1 to 6 carbon atoms.) $\text{NR}_{<5>} \text{R}_{<6>} \text{R}_{<7>}$ (in the formula (II), R<5> represents a linear or branched hydrocarbon group having 2 to 36 carbon atoms, and R<6> and R<7> represent hydrogen or an alkyl group having 1 to 6 carbon atoms.).

IPC 1-7
B01J 29/89; C07D 301/19; C07D 301/12; C07D 303/04; B01J 35/10; B01J 37/03

IPC 8 full level
B01J 21/06 (2006.01); **B01J 21/08** (2006.01); **B01J 37/00** (2006.01); B01J 35/10 (2006.01)

CPC (source: EP KR US)
B01J 21/063 (2013.01 - EP US); **B01J 21/08** (2013.01 - EP KR US); **B01J 35/633** (2024.01 - KR); **B01J 35/64** (2024.01 - KR);
B01J 37/0009 (2013.01 - KR); **B01J 37/0018** (2013.01 - EP KR US); **C07D 301/19** (2013.01 - KR); **B01J 35/635** (2024.01 - EP US);
B01J 35/647 (2024.01 - EP US)

Citation (search report)
• [XP] US 6096910 A 20000801 - YAMAMOTO JUN [JP], et al
• [E] US 6211388 B1 20010403 - TSUJI JUNPEI [JP], et al
• [E] US 6323147 B1 20011127 - YAMAMOTO JUN [JP], et al
• [E] EP 1243585 A1 20020925 - SUMITOMO CHEMICAL CO [JP]
• [X] WO 9843735 A1 19981008 - ARCO CHEM TECH [US], et al
• [X] WO 9855430 A1 19981210 - BASF AG [DE], et al
• [E] WO 0134298 A1 20010517 - BASF AG [DE], et al
• [A] US 5621122 A 19970415 - SAXTON ROBERT J [US], et al & NL 1012748 A1 20000208 - SUMITOMO CHEMICAL CO [JP] & NL 1013256 A1 20000417 - SUMITOMO CHEMICAL CO [JP] & NL 1012749 A1 20000208 - SUMITOMO CHEMICAL CO [JP]
• See also references of WO 0156693A1

Cited by
EP1364705A4; EP1371417A4; EP1588762A4; US7018950B2; US6887823B2

Designated contracting state (EPC)
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)

EP 1252928 A1 20021030; EP 1252928 A4 20041110; EP 1252928 B1 20060802; AT E334744 T1 20060815; AU 2885001 A 20010814;
BR 0107953 A 20021022; CA 2398692 A1 20010809; CN 1171679 C 20041020; CN 1396843 A 20030212; DE 60121914 D1 20060914;
ES 2267789 T3 20070316; KR 100693773 B1 20070312; KR 20020080390 A 20021023; US 2003083189 A1 20030501;
US 6838570 B2 20050104; WO 0156693 A1 20010809

DOCDB simple family (application)

EP 01948950 A 20010129; AT 01948950 T 20010129; AU 2885001 A 20010129; BR 0107953 A 20010129; CA 2398692 A 20010129;
CN 01804396 A 20010129; DE 60121914 T 20010129; ES 01948950 T 20010129; JP 0100585 W 20010129; KR 20027009577 A 20020725;
US 18198402 A 20021007